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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gilder et al.
Serial No. : 09/836,690
Filed : April 17, 2001
Title : SAFETY RAZORS

Art Unit : 3724
Examiner : Kenneth E. Peterson

Commissioner for Patents
Washington, D.C. 20231

RESPONSE

In response to the action mailed May 2, 2002, please consider the following remarks.

Applicant is planning to file a Terminal Disclaimer to obviate the obviousnss-type double patenting rejection.

The invention claimed herein relates to three-bladed shaving razors having a particular geometry.

The specification describes widespread success of two-bladed systems and proposals for three-bladed systems at page 1, line 17 - page 2, line 12:

> Safety razors having blade units with two blades have in recent years been sold in very large number and are generally acknowledged to give a better quality of shave, especially in terms of closeness, than single bladed razors. Furthermore, over the years there have been many written proposals to provide safety razors with several blades. A blade unit having many blades can produce a closer shave than a similar blade unit with only one or two blades. However, closeness of shave obtained is only one parameter by which razor users judge the performance of a razor. Adding extra blades can have a serious detrimental influence on other blade unit characteristics, most notably the drag forces experienced when the blade unit is moved over the skin, with the consequence that the overall performance of the blade unit can be markedly inferior despite a closer shave being obtainable. As a result, to our knowledge no razors with blade units incorporating more than two blades have been successfully marketed to date.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

November 1, 2002
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Jennifer Leveille
Signature

Jennifer Leveille
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In commercial two-blade razors such as the Trac II® razor of The Gillette Company, there is positive exposure on both blades.

The invention claimed herein grew out of the inventors' efforts in evaluating three-bladed systems. The inventors found that desirable results were achieved by having the first blade at a negative exposure, the third blade at a positive exposure. As recited in independent claim 1, the only independent claim, the blade unit has a guard, three blades, and a cap. Claim 1 further specifies that the first blade has "a negative exposure not less than -0.2mm," and the third blade has "a positive exposure of not greater than +0.2mm." With this arrangement, the blade related drag forces are reduced at the same time that enhanced shaving efficiency is provided by three blades. The dependent claims further specify the exposures and spans.

The arrangement recited in claim 1 is contrary to the conventional wisdom of commercial two blade systems having all blades with a positive exposure.

In the Office Action, the claims are rejected under 35 USC 103(a) on the basis of Welsh, which makes a general statement about "two or more blade strips" but then limits all discussion involving exposure to two-bladed systems.

In the Office action it is stated:

> Welsh does not set forth the specific blade exposures from Applicant's claim 1. However, on lines 31-33 of column 4, Welsh states the "*the second or follower blade can be given a greater exposure that would be desirable for the first or leading blade*". Welsh goes on to say that "*Either the leading blade or both blades may be given a negative exposure*".
>
> Given Welsh's teaching that the leading blade could have a negative exposure, and Welsh's teaching that following blades should have a higher, non-negative exposure, and Welsh's teaching that following blades can have a positive exposure, it would have been obvious to one of ordinary skill in the art to have set the blade so that the first bade had a negative exposure and the third blade have a positive exposure.
>
> More generally, Welsh teaches having a exposure differential of +0.003" between leading blades and flowing blades. Welsh gives examples of exposure for the leading blades of –0.003" and +0.003", but one of ordinary skill would recognize that one could pick any exposure therebetween as a starting point. For example, for the exposure of the leading edge, one could pick –0.001". Following Welsh's teachings, the second blade would have an exposure 0.003" higher, which would be 0.002", and the third blade would have an exposure 0.003" higher, which would be 0.005."

Fundamentally, the sentence at col. 4, lines 31-33 of Welsh partially quoted by the examiner is explicitly limited to two-bladed systems. The full sentence on which the examiner relies reads:

> With such tandem blades, the second or follower blade can be given a greater exposure than would be desirable for the first or leading blade, or for a single blade used alone.

The complete passage from Welsh reads as follows:

> With such tandem blades, the second or follower blade can be given a greater exposure than would be desirable for the first or leading blade, or for a single blade used alone. Accordingly, the follower blade 33 is preferable given a greater exposure than the leading blade 32. Either the leading blade or [1] both blades may be given a negative exposure. By way of example only, a tandem blade unit of the character shown in FIG. 8 gives highly satisfactory results if the arrangement and dimensions are as follows. . . . [2] The leading blade 32 has a positive exposure of 0.003 inch and a span of 0.050 inch. The follower blade 33 has a positive exposure of 0.006 inch . . . . Whilst positive exposures up to 0.006 inch are generally given to the follower blade higher exposures may be used. Satisfactory shaving results can be obtained with a [3] follower blade having zero exposure in combination with a leading blade having a negative exposure of -0.003 inch. (Col. 4, lines 31-53). (bracketed comments and emphasis added).

Welsh thus teaches that in two-blade systems, the second blade can have a greater exposure than the first blade and gives three situations as examples:

(1) both blades can have negative exposure,

(2) both blades can have positive exposure, and

(3) the second blade can have a zero exposure in combination with the leading blade having a negative exposure.

The next sentence quoted from Welsh in the Office Action describes a case where the first and second blade exposures are negative, or a case where the first blade exposure is negative without saying anything about the exposure on the second blade except that it is not negative; the exposure on the second blade could very well be zero, which is the example explicitly described later (designated example 3 above).

The Examiner thus picks and chooses from different examples in Welsh in order to find a teaching of a "negative exposure" on the first blade in combination with a "positive exposure" on the "last blade," which in Welsh is the second blade.

Welsh does not point to one of these three possibilities as being any more preferred than the other two.

Moreover, Welsh has no teaching at all with respect to using a third blade or what the exposure should be for a third blade. Welsh, in particular, does not describe where any such third blade should be positioned with respect to the first and second blades. The last paragraph quoted from the office action, where the examiner attempts to generalize Welsh's teachings to three blade systems, is pure speculation, which is not a proper basis for a rejection under 35 USC 103(a). One skilled in the art reading this passage in Welsh would not be led to the claimed invention and would much more likely than not arrive at three bladed systems that are different than the claimed invention. For example, if the two blades of Welsh were considered as the first two blades of a three-blade system, one of ordinary skill in the art might very well provide both blades with positive exposure according to the second example, which would result in something outside of the claimed invention regardless of whatever exposure is used for the third blade. Alternatively, one skilled in the art trying to glean something about three-blade systems from Welsh might pick the first example of two blades with negative exposure or might pick the third example of a negative exposure on the leading blade and a zero exposure on the follower blade as a starting point for blade exposures. With either of these examples as starting points, it is not clear whether the third blade should be added in front of the two blades, between the two blades or behind the two blades, and there is no teaching at all as to what the exposure should be for that third blade.

Simply put, any variety of different combinations of blade exposures can result from the teachings of the Welsh patent, and there is no suggestion at all of the particular arrangement described in claim 1. Claim 1 does not merely specify an increase in exposure in going from one blade to a later blade. E.g., the inventors went contrary to the conventional wisdom of two bladed systems of all blades being positive. Even Welsh says that all blades can have positive exposure, and Welsh also says that all blades can have negative exposure. One designing a three blade system might thus make all three blades positive or all three blades negative. Such

generalizations of Welsh's teachings (which are outside claim 1) are more valid than the Examiner's speculation with respect to three-blade systems.

Applicant asks that all claims be allowed. Enclosed is a $920 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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